



LOGGERHEADLINES

Sea Turtle News from South Carolina

June, 1999

Greetings

We hope everyone enjoyed the last issue of *Loggerheadlines*. This issue will also include news on strandings, nesting activity, news from South Carolina and around the region. We welcome contributions and suggestions. This newsletter is currently sent to 144 persons within the USA and abroad.

Strandings

A total of 29 carcasses was reported by the network for June. This is about half the number that were seen in June of 1998, and is also the second lowest total over the past five years. There were 21 loggerheads, four Kemp's ridleys, two green sea turtles and two turtles were unidentified. The islands near Charleston Harbor and Hilton Head Island account for over 50% of the strandings.

Of the 21 loggerheads, four were adult-sized animals. This is a few more than died in May, but the low number makes it difficult to speculate on the cause. We reported in the last issue that the larger openings for the leatherbacks could be helping to reduce the mortality for adult loggerheads also. This slight rise in adult-sized animals may be the result of more nesting females in our waters as the

season progresses, or it may be the result of some shrimp trawlers changing over to different nets which have the older and smaller sized TED openings for the brown shrimp season.

Tom Murphy conducted post mortem exams on two of the loggerheads. One had been hit by the prop of a boat, which injured the lung. This turtle was very thin and had numerous intestinal parasites. The other loggerhead appeared healthy, was actively feeding prior to death, and the reproductive tract indicated that this turtle may have been going through puberty.

Rehabilitating Turtles

A live green sea turtle washed ashore on Sullivan's Island in late March of this year. Despite a wind surfer's assistance in taking it out to sea, the turtle returned to shore. The turtle had a carapace length of 13 inches, the size commonly seen in South Carolina waters. It was emaciated, with its carapace and plastron heavily encrusted with barnacles and a variety of sea life.

After 16 days of care that began with intravenous fluids, the 8 pound turtle was eating more fish fillets and romaine lettuce than a family of four. The staff of the Karen Beasley Sea Turtle Rescue & Rehabilitation Center in Topsail, North Carolina, provided medical guidance via telephone. On 9 April 1999, the sea turtle was

flipper tagged and released in a cove near Fort Johnson, a known habitat of juvenile green sea turtles.

On 23 June 1999, a sub-adult loggerhead was released by the sea turtle hospital in Topsail after 9 months of care. The turtle, named "Huntington," washed ashore at Garden City Beach at the end of last summer, with 90% of its scutes deteriorated by fungal infection and weighing only 40 pounds. After rehabilitation, Huntington had healthy scutes covering its carapace and weighed 135 pounds.

We thank the volunteer help at the sea turtle hospital for their assistance with injured or sick South Carolina turtles this past year.

Leatherbacks

The National Marine Fisheries Service (NMFS) has completed the testing of the leatherback TED openings with longer flaps using small turtles near Panama City, Florida.

There was a control net with a medium TED and the opening was the size required for the Gulf of Mexico (slightly smaller than for the Atlantic). Treatment #1 was a leatherback bottom opening configuration and treatment #2 was a leatherback top opening configuration. Twenty-five small turtles were used in each test.

Here are the results: Control - 0 captures, 25 escapes, 1min 36sec escape time average. Treatment #1 - 1 capture, 24 escapes, 1min 16sec escape time average. Treatment #2 - 0 captures, 25 escapes, 48 sec escape time average.

Quoting from the report by John Mitchell, NMFS, "The leatherback modification appeared to enhance the escapement of the 2-year old turtles in that the extra width of the opening simply gave the turtles more area to escape from. The flap length did not cause a problem with escapement in either top or bottom configuration. As long as the TED angle and flotation requirements are adhered to, the leatherback opening should only help

escapement of both large and small turtles."

Nesting News

In the last issue, we reported on a world-class size male loggerhead. Here is news of a world-class size nest. Betsy Brabson, a volunteer for S.C.U.T.E., wrote to us about a large nest that was found on Hobcaw beach on June 1st. It contained 197 eggs. Two weeks later another nest was found in this same area that had 191 eggs. At each of these nests, eggs were reported completely filling the egg chamber and spilling out onto the beach. One turtle broke 26 of her eggs while covering. Betty Tines with the Edisto Beach turtle patrol also reported a large clutch of 193 eggs laid on June 2nd.

The largest loggerhead clutch recorded in the world (as of 1988) contained 198 eggs and was also from South Carolina (Cape Romain), as reported in a publication by Caldwell in 1959. (For a listing of clutch sizes from around the world see Kenneth Dodd, *Synopsis of the Biological Data on the Loggerhead Sea Turtle*, 1988.)

A loggerhead with tags nested on Hilton Head Island on July 1st. This turtle was tagged on Wassaw Island, Georgia, on July 2nd 1993, by the Savannah Science Museum. This is approximately 17 miles from its original tagging beach. Another loggerhead that nested on Pritchards Island on June 9th 1999 was also tagged on Wassaw on May 26th 1999. This turtle relocated 39 miles to lay its next clutch.

Enlightened Management

Folly Beach established a land-mark lighting ordinance recently. Their previous ordinance required lights to be turned out from 10pm to 6am. However, emergencies before 10pm were experienced last year. Following a meeting with Folly's volunteer turtle patrol, the city council voted unanimously to change the ordinance to have lights out from "dusk to dawn."

her right oviduct into the nest cavity while covering the eggs. She was taken off the beach for treatment and underwent surgery at NC State University College of Veterinary Medicine on 8 August 1997.

After her surgery, she was transported to the sea turtle hospital at Topsail, NC, for rehabilitation. After a slow start, she eventually achieved full recovery. Corncake was released off of Bald Head Island on 22 October, 1997. She nested this year on Bald Head Island on 9 June 1999 and laid 142 eggs! She has since laid a second clutch.

Notes on Folks

Chalk one up for the turtles and some "heads-up" volunteers with S.C.U.T.E. South Carolina Veterans of Foreign Wars (VFW) were planning to release balloons at noon on July 4th to celebrate the 100th anniversary of the group. A local teacher in Murrells Inlet heard of the plans and phoned to let them know that sea turtles and other marine species mistakenly eat balloons. Ann Wilson, the naturalist at Myrtle Beach State Park, sent the local chapter information on this issue. That Chapter of VFW immediately canceled the plans, but other chapters had not heard the news. Jeff McClary, project leader for S.C.U.T.E. called Sally Murphy on Saturday, June 25th. She contacted Lynn Langley, with the *Charleston Post and Courier Newspaper*, on Monday and asked her to run a story. It appeared on Tuesday morning. The state VFW Commanders were meeting in Columbia that same day. By noon Tuesday, they had issued the order for ALL posts to cancel the releases. Our thanks go out to the VFW for their concern and quick action, to the volunteers who "sounded the alert" and to Lynn Langley and the *Post and Courier* for the story. We hope other individuals or groups will hear of this and also refrain from releasing balloons on holidays or ever.

Tribute to Joan Drews (Retired 30 June 1999, after 14 years with the Endangered Species Office.)

Trying to describe Joan's role in this office is like trying to remember the things you did **not** see on a survey. A good example is *Loggerheadlines*. I would write a rough draft while Joan added the latest data to the tables. After correcting this draft, I would turn it over to Joan. Within two days, everything was in the mail and there would be a new copy on my desk. It was like magic.

It was the same with workshops or meetings. I would put together the agenda and let her know what I wanted each attendee to have. The day of the meeting, packets would be ready with name tags and in alphabetical order for each person to pick up. Again, everything just appeared like magic.

Most of you on the network know, that if you needed additional data forms or maps, and you happened to get me on the phone, the answer was, "I'll have Joan send those to you."

But it wasn't just Joan's efficiency and organization that I appreciated. I thoroughly enjoyed her sense of humor. I'm sure some of the workers in our building thought there was a continuous party going on up here, especially if Meg was present. Office days aren't the same without her. She was also a willing helper for duties and functions here at the Marine Resources Center.

I believe I speak for all of Joan's coworkers in both divisions, and members of the network when I say "thank you" for her contributions to the DNR over the years. (SRM)

Reminders

- ✓ Call in any strandings to the Charleston DNR office immediately, and send the completed stranding forms soon thereafter. Stranding data is summarized nationally each Monday.

Beach front homes at Folly are required to have shielded outdoor lighting. Beach street lights will also be hooded with the cooperation of SCE&G. The Folly turtle patrol will have door-knob signs printed in the near future to publicize this new ordinance.

At the April workshop Betsy Brabson spoke of a type of window pane that reduces the amount of light transmitted from inside of a house. When used, there will be less light visible at night on the beach, thereby being less of a source of disorientation to nesting females and hatchlings than traditional window panes. This type of tinted glass has been aptly named "turtle glass." It is certainly something to be promoted, especially among new developments and their contractors. Information can be obtained from William Brabson, Muhler Company, 422 Savannah Hwy, Charleston, SC 29407, Phone (843)556-6048 and Fax (843)769-7323.

Special Feature

TRAINING VIDEO: WE WANT YOUR INPUT

The most popular recommendation made by the Nest Protection Projects in last year's survey was to develop a training video for volunteers working on our beaches with sea turtles. Such a video will supplement the Permit Holder Guidelines and provide visual explanations for how beaches are surveyed, nests located and protected, and inventories conducted.

Having a tool that can be made available to all the Projects will enable volunteers to review the information as frequently as is necessary, as well as provide standardized information to all the projects. While this video is not a replacement for the training visits currently conducted by DNR, it will provide volunteers with a head-start so as to maximize the limited time available during DNR training visits. It will also assist in preparing volunteers before the season

begins, so as to have the basic information in hand when the first nest is laid.

We are currently exploring the logistics and costs of such a production. Following the outline of the Guidelines we can include nest characteristics, probing, predator control, relocation, inventories, and hatchling release. We would like it to be a collaborative venture between the Nest Protection Projects and DNR, and would therefore like to hear your suggestions in this regard. What would you like to see covered in such a video (specific topics)?

We look forward to your input as soon as possible, so that, if we do launch this activity this season, we can collect some of necessary film footage before the turtle nesting season is over.

Regional News

Florida - Dr. Blair Witherington, with Florida Dept. of Environmental Protection, says they are having a record breaking year for leatherback nesting in Florida. The season for leatherbacks is not over and not all of the data are in, but they have surpassed last year, which was also a record breaking year. Blair is also the President of the upcoming 20th Symposium on Sea Turtle Biology and Conservation. Mark you calendars for February 29th through March 4 in Orlando, Florida at the Delta Resort. More details to follow in subsequent issues of *Loggerheadlines*.

Georgia - Mark Dodd with Georgia DNR reports that nesting is about 30% above last year, but that strandings are higher too. Cumberland Island had a leatherback crawl, but the egg chamber could not be located. They will monitor at hatching time in order to verify if a nest was laid.

North Carolina - Ruth Boettcher, with the North Carolina Wildlife Commission, sent us this story of Corncake. She was a regular nester on Bald Head Island. On the night of 1 August 1997, after successfully laying a clutch of eggs, she expelled

- ✓ Mark the stranding location on a site map and send it in with the form.
- ✓ Save very fresh carcasses and report immediately so that it can be picked up for a post-mortem. Keep cool if possible.
- ✓ Do not dispose of any strandings with carapaces smaller than 20 inches. Notify the Charleston DNR office. (Kemp's Ridley turtles may carry internal tags and therefore need to be scanned.)
- ✓ Start checking nests with more than 45 days of incubation for evidence of emergence.
- ✓ Raise screens to the surface to avoid trapping of hatchlings if new sand has built on nests.
- ✓ Start checking on potential sources of artificial lighting that can disorient hatchlings, and ensure that such lights are turned off or shielded.

- ✓ The first nests generally take longer to incubate, therefore, give plenty of time to emerge naturally, and conduct inventories only after 72 hours.

For any questions please contact...

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Thanking you for all your efforts...

Sally Murphy, *State Coordinator*
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